

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

ANDREW J. SULAK, ET AL.	§	
	§	
V.	§	ACTION NO. 4:09-CV-651-Y
	§	
AMERICAN EUROCOPTER	§	
CORPORATION, ET AL.	§	

ORDER DENYING MOTION FOR SUMMARY
JUDGMENT AND DENYING MOTION TO EXCLUDE

Pending before the Court are defendant Eurocopter, S.A.S.'s Motion for Summary Judgment (doc. 141) and Motion to Exclude (doc. 136), both filed April 20, 2012. The Court DENIES the motions.

I. BACKGROUND

In 2007, a helicopter piloted by William J. Sulak crashed in Hawaii, killing Sulak and three passengers and injuring the other three passengers. (Summ. J. App. 14, 23.) At the time of the accident, the helicopter was engaged in a sightseeing flight that was a non-scheduled or on-demand taxi operation. (Summ. J. App. 28.) The helicopter involved in the accident was designed and manufactured by Eurocopter, S.A.S. ("Eurocopter"), in 1979.¹ (Summ. J. App. 2, 15.) Defendant American Eurocopter Corporation ("AEC") bought the helicopter from Eurocopter as Eurocopter's distributor in the United States.² (Summ. J. App. 7.) The helicopter was delivered to AEC in April 1980. (Def. App. 4.) In 1997, AEC sold the helicopter to Metro Aero Sales, subject to a lease of

¹The helicopter was designed and manufactured in France by Eurocopter's predecessor, Société Nationale Industrielle Aérospatiale. (Summ. J. App. 2.)

²The helicopter was sold to AEC's predecessor, Aérospatiale Helicopter Corporation. (Summ. J. App. 2, 7, 100.)

the helicopter to Silverado Helicopters, Inc. (“Silverado”). (Summ. J. App. 101.) Heli-USA Airways, Inc. (“Heli-USA”), operated the helicopter for Silverado in Hawaii.³ (Summ. J. App. 2, 27.)

After the accident, the National Transportation Safety Board (“NTSB”) conducted an investigation and determined that mechanical failure combined with faulty maintenance was the cause of the crash. Specifically, the problem involved the separation of the lower portion of the hydraulic system from the main rotor blade:

Safety Board investigators found that the main left lateral flight control hydraulic servo had become detached from its clevis mounting bolt and no evidence was found of thread damages to the mounting clevis. A disconnection of the main left lateral flight control hydraulic servo (subsequently referred to as the left lateral servo) from its respective mounting clevis causes a failure in the flight control system such that the helicopter is no longer controllable in the roll direction. Upon closer examination of the left lateral servo, staff found that the washer used to help secure the piston end of the servo to the rod end of the clevis was severely worn (with a missing tang).^[4] Also, a lack of torque was noted on the attachment nut used to secure the servo to the mounting clevis.

(Summ. J. App. 37.)

Plaintiffs, Sulak’s family (“the Sulaks”), filed suit against AEC and Eurocopter for negligence, failure to warn, strict product liability, and breach of warranty. The Sulaks alleged that the causes of the crash were defects in flight-control components (which were designed, manufactured, and distributed by AEC and Eurocopter) and the failure to warn of such defects. (3^d Am. Compl. 3-4.) Against Eurocopter, the Sulaks mainly relied on the allegedly defective lock

³The Court notes that the parties’ factual assertions and supporting evidence have differed slightly over the course of this litigation regarding the actual lessee and actual owner of the helicopter. (July 19, 2011 Order in 4:09-CV-655-Y 1-2; Oct. 3, 2012 Order 1-2.) The Court relies solely on the evidence submitted by the parties regarding the instant motions and does not consider evidence submitted with other motions regarding ownership of the helicopter.

⁴A tang is a metal tab located on the inside circle of the lock washer. (Summ. J. App. 27.)

washer, which was designed by Eurocopter (Summ. J. App. 44, 95), as the cause of the separation between the lower portion of the hydraulic system from the main rotor blade and, thus, of the crash.

(3^d Am. Compl. 4; Resp. 4.)

AEC and Eurocopter answered and alleged that the crash was caused by Heli-USA's negligence in its repair and maintenance of the helicopter. (Answer 8.) The Sulaks dismissed their claims against AEC, but a final judgment as to AEC has not been entered. See Fed. R. Civ. P. 54(b). Eurocopter now argues that it is entitled to judgment as a matter of law based on the applicability of the federally-mandated statute of repose and the Sulaks failure to raise a genuine dispute as to the existence of a defect.

II. STANDARD OF REVIEW

When the record establishes “that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law,” summary judgment is appropriate. Fed. R. Civ. P. 56(a). “[A dispute] is ‘genuine’ if it is real and substantial, as opposed to merely formal, pretended, or a sham.” *Bazan v. Hidalgo Cnty.*, 246 F.3d 481, 489 (5th Cir. 2001) (citation omitted). A fact is “material” if it “might affect the outcome of the suit under governing law.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

To demonstrate that a particular fact cannot be genuinely in dispute, a defendant movant must (a) cite to particular parts of materials in the record (e.g., affidavits, depositions, etc.), or (b) show either that (1) the plaintiff cannot produce admissible evidence to support that particular fact, or (2) if the plaintiff has cited any materials in response, show that those materials do not establish the presence of a genuine dispute as to that fact. See Fed. R. Civ. P. 56(c)(1). Although the Court

is **required** to consider only the cited materials, it **may** consider other materials in the record. *See id.* 56(c)(3). Nevertheless, Rule 56 “does not impose on the district court a duty to sift through the record in search of evidence to support a party’s opposition to summary judgment.” *Skotak v. Tenneco Resins, Inc.*, 953 F.2d 909, 915-16 & n.7 (5th Cir. 1992). Instead, parties should “identify specific evidence in the record, and . . . articulate the ‘precise manner’ in which that evidence support[s] their claim.” *Forsyth v. Barr*, 19 F.3d 1527, 1537 (5th Cir. 1994).

In evaluating whether summary judgment is appropriate, the Court “views the evidence in the light most favorable to the nonmovant, drawing all reasonable inferences in the nonmovant’s favor.” *Sanders-Burns v. City of Plano*, 594 F.3d 366, 380 (5th Cir. 2010) (citation and internal quotation marks omitted). “After the non-movant has been given the opportunity to raise a genuine factual [dispute], if no reasonable juror could find for the non-movant, summary judgment will be granted.” *Byers v. Dallas Morning News, Inc.*, 209 F.3d 419, 424 (5th Cir. 2000) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986)).

If a defendant moves for summary judgment on the basis of an affirmative defense, such as a statute of repose, the defendant has the burden of establishing the affirmative defense. *See Koch v. Shell Oil Co.*, 52 F.3d 878, 880 (10th Cir. 1995); *cf. Crescent Towing & Salvage Co. v. M/V Anax*, 40 F.3d 741, 744 (5th Cir. 1994) (statute-of-limitations defense); *Bank One, Tex., N.A. v. Prudential Ins. Co. of Am.*, 878 F. Supp. 943, 962 (N.D. Tex. 1995) (statute-of-limitations defense) (Fitzwater, Dist. J.). Thus, it is the defendant’s obligation on summary judgment to demonstrate the applicability of a statute of repose. *See Fed. R. Civ. P. 8(c)(1)*; *S. Side Trust & Sav. Bank of Peoria v. Mitsubishi Heavy Indus., Ltd.*, 927 N.E.2d 179, 193 (Ill. Ct. App. 2010) (federal statute of repose); *cf. Ryland Group, Inc. v. Hood*, 924 S.W.2d 120, 121 (Tex. 1996) (state statute of repose). If the

defendant establishes the applicability of the statute-of-repose defense, the plaintiff then must go beyond the pleadings and set forth specific facts that operate to toll or create an exception to the repose period. *See Koch*, 52 F.3d at 880; *S. Side Trust*, 927 N.E.2d at 193; *cf. McGregor v. La. State Univ. Bd. of Supervisors*, 3 F.3d 850, 865 (5th Cir. 1993) (statute of limitations).

III. STATUTE OF REPOSE

A. APPLICATION OF STATUTE OF REPOSE

In 1994, Congress enacted the General Aviation Revitalization Act (“GARA”) to address problems affecting the aviation industry and “the enormous product liability costs that our tort system has imposed upon manufacturers of general aviation aircraft.” *Lyon v. Augusta S.P.A.*, 252 F.3d 1078, 1084 (9th Cir. 2001). Congress especially was concerned with the unlimited reach of liability attached to aircraft that could be used for decades after manufacture. *See id.* Therefore, GARA contains a statute of repose that bars suits against manufacturers of aircraft or of component parts from accidents that occurred more than 18 years after the initial transfer of the aircraft:

[N]o civil action for damages for death or injury to persons or damage to property arising out of an accident involving a general aviation aircraft may be brought against the manufacturer of the aircraft or the manufacturer of any new component, system, subassembly, or other part of the aircraft, in its capacity as a manufacturer if the accident occurred . . . after the applicable limitation period beginning on . . . the date of delivery of the aircraft to its first purchaser or lessee, if delivered directly from the manufacturer; or . . . the date of first delivery of the aircraft to a person engaged in the business of selling or leasing such aircraft.

GARA of 1994 § 2(a)(1), 49 U.S.C.A. § 40101 hist. & stat. nn. (West 2007). A general aviation aircraft is defined as:

[A]ny aircraft for which a type certificate or an airworthiness certificate has been issued by the Administrator of the Federal Aviation Administration, which, at the time such certificate was originally issued, had a maximum seating capacity of fewer

than 20 passengers, and which was not, at the time of the accident, engaged in scheduled passenger-carrying operation as defined under [federal] regulations in effect . . . at the time of the accident.

Id. § 2(c).

The statute of repose includes a “rolling provision” that restarts the 18-year statute of repose against the manufacturer of any new or replacement part:

[W]ith respect to any new component, system, subassembly, or other part which replaced another component, system, subassembly, or other part originally in, or which was added to, the aircraft, and which is alleged to have caused such death, injury, or damages, . . . the [18-year statute of repose] begin[s] on the date of completion of the replacement or addition.

Id. §§ 2(a)(2), 3(3).

Here, the Sulaks do not contest the applicability of the statute of repose. Indeed, Eurocopter has produced undisputed summary-judgment evidence establishing that the helicopter involved in the crash was a general aviation aircraft as defined by GARA. (Summ. J. App. 14, 28, 69, 71-72, 101, 114, 116.) It also is undisputed that the helicopter first was sold more than 18 years before the crash. (Summ. J. App. 2, 4, 7.) Thus, there is no genuine dispute of material fact regarding the applicability of GARA’s statute of repose to the Sulaks’ claims against Eurocopter.

B. ROLLING PROVISION

However, the Sulaks argue that the rolling provision applies to restart the limitations period contained in GARA’s statute of repose because the lock washer had been replaced and the maintenance manuals had been amended. (Resp. 4-5, 10-11.) As stated above, the Sulaks bear the burden of producing sufficient evidence to raise a genuine dispute of material fact regarding the applicability of the rolling provision. *See Agape Flights, Inc. v. Covington Aircraft Engines, Inc.*, No. CIV-09-492-FHS, 2011 WL 2560281, at *5 (E.D. Okla. June 28, 2011). Thus, the Sulaks must

raise a genuine dispute “that a **new** item replaced an item either originally in the aircraft or added to the aircraft **and** the new item was also a cause of the claimed damages.” *S. Side Trust*, 927 N.E.2d at 193 (emphases added); *see also* GARA of 1994 § 2(a); *Sheesley v. Cessna Aircraft Co.*, No. 02-4185-KES, 2006 WL 1084103, at *4 (D.S.D. Apr. 20, 2006); *Carson v. Heli-Tech, Inc.*, No. 2:01-CV-643, 2003 WL 22469919, at *4 (M.D. Fla. Sept. 25, 2003).

1. Replacement With New Part

In asserting that there is a genuine dispute of material fact as to whether the original lock washer was replaced with a new lock washer after 1989,⁵ the Sulaks point to the declaration of Heli-USA’s maintenance director and a participant in the NTSB’s investigation, David A. Lok:

The lock washer . . . on the lower rod end of the left lateral servo is replaced (or removed and reinstalled) each time the servo is overhauled, which occurs every 1,800 flight hours. . . . At the time of the accident, Heli-USA was flying its aircraft approximately 1,500 to 2,000 hours per year, so the lock washer would have been replaced (or removed and reinstalled) at least once a year. . . . At the time of the accident, [the subject helicopter] had a total time of 21642.7 on the airframe. Based on the required overhaul time for the servos, this aircraft would have had the lock washer replaced (or removed and reinstalled) at least 12 times. . . . It is highly unlikely that the lock washer on the lower rod end of the left lateral servo on [the subject helicopter] at the time of the accident had been first installed on a rod end more than eighteen years before the accident.

(Resp. App. 12-13.) The Sulaks’ accident-reconstruction expert, Kenneth L. Orloff, stated that the lock washer was not identified as a “routine replacement” item and had no inspection requirements.

(Resp. App. 31.) Eurocopter, when designing the lock washer, expected that it would experience wear over time but that it could be reused. (Summ. J. App. 96.) It is not possible to determine how long a lock washer has been installed and in use because it is not tracked by a serial number and is

⁵The Sulaks frame their factual assertions as if Eurocopter had the burden to raise a genuine dispute that the lock washer is the same as the original lock washer installed when the helicopter was first sold. However, it is the Sulaks’ burden to raise facts showing a genuine issue that the lock washer had been replaced with a new lock washer during the 18 years before the crash. *See Agape Flights*, 2011 WL 2560281, at *5. (Reply 2-3 n.2.)

subject to replacement at the discretion of the mechanic. (Resp. App. 15, 26.) The maintenance records compiled by the NTSB show that the left lateral servo (of which the lock washer is a component part) was overhauled with “serviceable” parts multiple times. (Summ. J. App. 48, 51, 82-88.) The NTSB report notes, however, that the “left lateral servo was removed and replaced” on February 9, 2007. (Summ. J. App. 16.) These records do not mention the lock washer specifically.

At first blush, this evidence does not seem to establish that the original lock washer was replaced with a new lock washer at any point within 18 years before the 2007 crash. (Reply 4-5.) The majority of Lok’s declaration merely suggests that the lock washer might have been replaced based on the fact that routine maintenance would necessarily involve the lock washer’s being “replaced (or removed and reinstalled)” many times after the helicopter was manufactured.⁶ Of course, an overhauled or “removed and reinstalled” lock washer is not a new lock washer sufficient to reset GARA’s repose period under the rolling provision. *See Robinson v. Hartzell Propeller, Inc.*, 326 F. Supp. 2d 631, 663-64 (E.D. Pa. 2004); *Willett v. Cessna Aircraft Co.*, 851 N.E.2d 626, 636 (Ill. App. Ct. 2006); *Hiser v. Bell Helicopter Textron, Inc.*, 4 Cal. Rptr. 3d 249, 257 (Cal. Ct. App. 2003). But Lok’s declaration goes one step further than the evidence produced in *Agape Flights*, which Eurocopter heavily relies on in arguing against the application of the rolling provision. In *Agape Flights*, the evidence produced by the plaintiffs showed that the part at issue “**might have** been replaced or **should have** been replaced given historical data of wearing of the [part]. There

⁶The Sulaks argue that Eurocopter did not produce any maintenance records regarding the replacement of the lock washer during discovery. (Resp. 8-10.) But as discussed above, it was not Eurocopter’s burden to produce evidence that the lock washer on the helicopter at the time of the crash was either the original lock washer that had been overhauled and replaced or a lock washer that was manufactured more than 18 years before the crash. Further, Eurocopter did not maintain the helicopter after its sale and, thus, would not possess the maintenance records.

is no maintenance record or other similar document, however, establishing that the [part] was indeed replaced with[in] the 18-year period before the date of the crash.” *Agape Flights*, 2011 WL 2560281, at *5 (emphases added). Lok, however, goes one step further than his assertions that the lock washer might or should have been replaced—he states that it is “highly unlikely” that the lock washer on the helicopter at the time of the crash was the same lock washer that was installed on the helicopter more than 18 years before the accident. In effect, Lok states, in his capacity as maintenance director for Heli-USA, that the lock washer **would have** been replaced. *Cf. Willett*, 851 N.E.2d at 636 (holding expert testimony that part “would have been either replaced or overhauled” insufficient to trigger GARA’s rolling provision and noting expert did not state part would have been replaced with new part); *Agape Flights*, 2011 WL 2560281, at *5 (holding rolling provision inapplicable where no evidence of replacement less than 18 years before crash). The Court concludes that this evidence is sufficient to create a genuine dispute that the lock washer had been replaced with a new lock washer less than 18 years before the crash. *Cf. Hiser*, 4 Cal. Rptr. at 256-57 (holding replacement as used in GARA means substitution of one item for another, new item). In short, a reasonable jury could find by a preponderance of the evidence that the lock washer on the helicopter at the time of the crash was manufactured less than 18 years before the crash.

The Sulaks also contend that because Eurocopter’s maintenance manuals were amended in 2004 to provide for a different torque to secure the nut placed over the lock washer, a component part was replaced less than 18 years before the crash. This replacement of a component part, the Sulaks allege, restarts the repose period under GARA’s rolling provision.⁷ (Resp. 10.) But as

⁷The Court disagrees with the Sulaks that the question of whether a maintenance manual is a component part should be subject to a choice-of-law analysis. (Resp. 11.) The interpretation of a federal statute of repose is governed by federal law. Whether two federal courts disagree on an issue of substantive law does not raise a choice-of-law inquiry. (Reply 8.)

Eurocopter argues, maintenance manuals are not “component parts” subject to the rolling provision of GARA’s statute of repose. *See Alter v. Bell Helicopter Textron, Inc.*, 944 F. Supp. 531, 538-41 (S.D. Tex. 1996); *Agape Flights*, 2011 WL 2560281, at *6; *S. Side Trust*, 927 N.E.2d at 197. Therefore, the Sulaks have failed to sustain their burden of raising a genuine issue that GARA’s rolling provision applies to reset the statute of repose based on amended maintenance manuals.

2. Causation

The application of GARA’s rolling provision also requires the Sulaks to raise a genuine dispute as to whether the new lock washer actually caused the crash. *See Carson*, 2003 WL 22469919, at *4. Eurocopter does not argue that the Sulaks have failed to raise a genuine dispute regarding causation.⁸ Thus, the Court assumes, for summary-judgment purposes only, that the Sulaks have raised a material factual dispute that the lock washer caused the crash. Indeed, the NTSB listed the condition of the lock washer as a cause of the crash. (Summ. J. App. 37.)

C. GARA CONCLUSION

GARA applies to the helicopter involved in the crash at issue. However, the Sulaks have raised a genuine dispute of material fact regarding whether the rolling provision applies to save their claims from the operation of the statute of repose. It is important to emphasize that the Sulaks have not established as a matter of law that the rolling provision of GARA applies to save their claims from GARA’s statute of repose. Instead, the Sulaks have merely raised a genuine dispute of material fact on the issue.

⁸Eurocopter does argue there is no evidence of a defect, which will be addressed below.

IV. EVIDENCE OF DEFECT

Eurocopter argues that there is no evidence of a product defect if the Court excludes Orloff's expert opinions.⁹ Eurocopter urges the Court to exclude Orloff's expert opinions because he "has neither the necessary expertise to render the opinions he offers, nor has he employed reliable methods which would make . . . his opinions helpful or appropriate for the jury to consider." (Mot. to Exclude Mem. 1.) *See* Fed. R. Evid. 702.

A. RULE 702 STANDARD

A challenge to expert testimony is different from other evidentiary objections. Generally, expert testimony is admissible when it is reliable and when it will assist the trier of fact. *See* Fed. R. Evid. 702. This court has substantial latitude to determine whether specific expert testimony is reliable. *See Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 588 (1993); *Satcher v. Honda Motor Co.*, 52 F.3d 1311, 1317 (5th Cir. 1995). However, "the rejection of expert testimony is the exception rather than the rule." Fed. R. Evid. 702 advisory committee's notes (2000 amendments). Expert testimony is admissible to aid the fact-finder in determining a fact in issue if the testimony is based upon sufficient facts or data, the testimony is the product of reliable principles and methods, and the witness has applied the principles and methods reliably to the facts of the case. *See* Fed. R. Evid. 702. In short, expert testimony is admissible if the proponent shows that (1) the expert is qualified, (2) the evidence is relevant to the suit, and (3) the evidence is reliable. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999).

In determining admissibility of an expert opinion, this Court may consider some or all of the

⁹Eurocopter relies solely on the inadmissibility of Orloff's testimony to support its no-evidence argument; thus, if the Court disagrees with Eurocopter's argument regarding Orloff, there is no further argument that there is no evidence of a defect. (Summ. J. Br. 7, 12.)

Daubert factors¹⁰ when qualitatively evaluating reliability. *See id.* 149-50. In other words, this Court performs a screening or gatekeeping function to ensure that the expert's testimony is the product of reliable principles and methods. *See id.* at 152; *see also* Fed. R. Evid. 702(c). Indeed, in cases where the expert is qualified by experience, some of the *Daubert* factors are worthy of less emphasis, and the expert may draw conclusions from a set of observations based on that experience. *See id.* at 156; *Watkins v. Telesmith, Inc.*, 121 F.3d 984, 988, 990 (5th Cir. 1997).

Normally, questions regarding the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility, which should be left for the fact-finder's consideration. *See United States v. 14.38 Acres*, 80 F.3d 1074, 1077 (5th Cir. 1996); *Dixon v. Int'l Harvester Co.*, 754 F.2d 573, 580 (5th Cir. 1985). Additionally, the Court has the power to avoid unnecessary proof and cumulative evidence and may limit the use of expert testimony. *See* Fed. R. Civ. P. 16(c)(2)(D).

B. APPLICATION

Eurocopter's summary-judgment motion asserts that Orloff's lack of qualifications and the unreliability of his evidence render his opinion no evidence of a product defect, which is fatal to the Sulaks' product-liability assertions. (Summ. J. Br. 12.) As the party seeking Orloff's disqualification, Eurocopter bears the burden to show that Orloff's opinions must be excluded. *See Koch Ref. Co. v. Jennifer L. Boudreaux M/V*, 85 F.3d 1178, 1181 (5th Cir. 1996).

As an accident-reconstruction expert, Orloff opined that the crash was a result of "the design of the rod end fitting, the lock washer, and the installation instructions provided in the Eurocopter

¹⁰These illustrative factors include whether the methodology used can be and has been tested, whether the methodology has been subjected to peer review, whether there is a known potential rate of error, whether there are standards controlling the technique used, and whether a known technique is generally accepted in the relevant scientific or technical community. *Daubert*, 509 U.S. at 592-95.

... Maintenance Manual.”¹¹ (Mot. to Exclude Resp. App. 53, 121.) Orloff detailed several “events and factors” that “led to the loosening, unscrewing, and disengagement of the lower rod end fitting of the left lateral servo”:

- At the time of the installation of the left lateral servo by Mechanic [Michael] Ray [which was 131 flight hours before the crash], the condition of the lock washer was such that the thickness of the washer and the shortened tang could enter the horizontal recess. However, when the tang was in the vertical slot of the red end fitting, not aligned with the horizontal recess, it would likely appear captive and subjectively considered airworthy by ... Ray.
- During final assembly, prior to tightening of the jam nut, the thickness of the lock washer was able to enter into the horizontal recess or into the threads [of the lower clevis]
- At least a part of a thread circumference extended beyond the face of the servo shaft. As a result, as the jam nut was tightened, the lock washer was not flush against the face of the servo shaft The majority of the applied tightening torque was likely “absorbed” by interference between the lock washer and the threads of the rod end fitting. Therefore, the applied torque was relatively ineffective at forcing the face of the washer against the end of the servo shaft.
- After assembly and tightening, the primary “locking” feature was the frictional interference of the tang and inner diameter of the lock washer against the threads of the rod end fitting. Additionally, the process of lock-wiring the jam nut may have begun the loosening process.
- In operation, the repeated application of counter-clockwise torque at the servo shaft eventually loosened the lock washer from the threads. At that point, the lock washer was, in effect, a secondary “nut” that unthreaded from the rod end fitting along with the jam nut.

(Mot. to Exclude Resp. App. 55-56.) Orloff believed design characteristics of the servo, the rod-end fitting, and the lock washer “facilitated” the separation of the lower rod end from the servo shaft. Further, Orloff argued that Eurocopter’s alternate and available design for the lock washer, which

¹¹The lower clevis, or rod-end fitting, is attached to the left lateral servo shaft with a nut and a lock washer. (Mot. to Exclude Resp. App. 51.)

is thicker than previous lock washers, “would have avoided the accident.” (Mot. to Exclude Resp. App. 52.) In short, Orloff determined that even if Ray had applied appropriate torque to the nut over the lock washer, the crash would have still occurred based on the condition of the lock washer at the time of the crash. (Mot. to Exclude Resp. App. 121.)

1. Qualification

Eurocopter first challenges Orloff’s qualification to opine that the lower rod end fitting separated from the left lateral servo shaft based on the design of the rod-end fitting, the lock washer, and the installation instructions supplied by Eurocopter. (Mot. to Exclude Resp. App. 53.) The Sulaks rely on Orloff’s education, licences, and experience “in litigation resulting from aircraft accidents.” (Mot. to Exclude Resp. 7-8.) Eurocopter, while acknowledging that Orloff holds advanced degrees in physics, mechanical engineering, and aeronautical engineering, contends that he only has a “veneer of credibility” because he has no helicopter-design experience. (Mot. to Exclude 3; Mot. to Exclude Reply 1.) Indeed, for a court to determine that an expert’s opinion will help the fact-finder and, thus, be admissible, an expert’s qualifying training or experience, and resulting specialized knowledge, must be sufficiently related to the issues and evidence before the fact-finder. *See, e.g., Primrose Operating Co. v. Nat’l Am. Ins.*, 382 F.3d 546, 562-63 (5th Cir. 2004); *accord Smith v. Ford Motor Co.*, 215 F.3d 713, 717 (7th Cir. 2000).

During his deposition, Orloff testified that he is not a design expert on servos or related attachments. (Mot. to Exclude Resp. App. 121.) He clarified that he was not criticizing the design, but merely was “observing design characteristics as designed,” which could be determined merely by observation in combination with experience. (Mot. to Exclude Resp. App. 81.) In arguing that Orloff is qualified to testify as to design characteristics of the servo and its component parts, the

Sulaks emphasize that Orloff only is explaining the function and intended design purpose of the servo system:

Orloff pointed out that [Eurocopter's] own fail-safe/redundant design criteria was not met because a foreseeable situation can occur, as was explained by . . . Ray, where the mechanic believes the lock washer remains acceptable ("on condition") for continued use, the lock washer cannot rotate when placed within the vertical groove, but due to some wear of the washer's tang, it can rotate when the tang aligns with the vertical and horizontal grooves on the clevis bolt, if the nut does not have enough torque friction.

(Mot. to Exclude Resp. 10-11 (citing Mot. to Exclude Resp. App. 51-58).) The Court agrees with the Sulaks that Orloff possesses sufficient credentials to allow admission of his testimony regarding design of the servo and its component parts. Although Orloff has not designed a helicopter servo or any component parts, he has significant experience in investigating and consulting regarding aircraft structures, structural failure, maintenance, alteration, and repair. (Mot. to Exclude Resp. App. 64.) This experience, combined with his educational background, qualifies Orloff to proffer his opinions as outlined above. *See, e.g., Roman v. W. Mfg., Inc.*, 691 F.3d 686, 692-93 (5th Cir. 2012); *Dearmond v. Wal-Mart La., LLC*, 335 F. App'x 442, 445-46 (5th Cir. 2009) (per curiam); *Smith v. United States*, No. 2:06-CV-947, 2008 WL 5262367, at *2 (W.D. La. Dec. 16, 2008).

2. Reliability

Eurocopter next argues that Orloff's testimony must be excluded because it is unreliable—i.e., it is not based upon a scientifically valid methodology or a sufficient factual predicate. (Mot. to Exclude 7-8.)

Eurocopter first contends that Orloff did not subject his opinions to appropriate scientific testing in developing his theory, which renders them inadmissible. (Mot. to Exclude 9-10; Mot. to Exclude Reply 7-8.) *See* Fed. R. Evid. 702(c). Whether Orloff subjected his theory to testing is only

one factor listed in *Daubert*. See *Daubert*, 526 U.S. at 593-94. As discussed above, the *Daubert* factors are not a rigid checklist that must be satisfied individually in order for the opinion to be admissible. See *Kumho*, 526 U.S. at 150. In short, the admissibility of expert testimony under Rule 702 is case specific and is qualitative versus quantitative:

If an engineering expert can demonstrate that his proposed [alternative] design has been tested, peer reviewed, or is generally accepted, then so much the better. On the other hand, this does not mean that engineering testimony on alternative designs should be excluded automatically if it cannot withstand a strict analysis under *Daubert*. The inquiry is case specific. It may well be that an engineer is able to demonstrate the reliability of an alternative design without conducting scientific tests, for example, if he can point to another type of investigation or analysis that substantiates his conclusions If the expert's opinions are based on facts, a reasonable investigation, and the traditional technical/mechanical expertise, and he provides a reasonable link between the information and procedures he uses and the conclusions he reaches, then rigid compliance with *Daubert* is not necessary.

Tassin v. Sears, Roebuck & Co., 946 F. Supp. 1241, 1248 (M.D. La. 1996). Here, Orloff relied on his experience in aviation engineering and his examination of (1) post-accident pictures of the helicopter, (2) the parts of the left lateral servo involved in the accident, (3) the NTSB's investigation documents, and (4) exemplar servo attachment parts. (Mot. to Exclude Resp. App. 52.) Although Orloff was relying on an alternate design in explaining the causative effect of the condition of the lock washer, the alternate design is already being manufactured by Eurocopter. The Court concludes that the lack of scientific testing is not fatal to admission of Orloff's opinions. Orloff's opinions are based on a reasonable investigation, are the result of his engineering expertise, and provide a reasonable link between the reviewed information and his conclusions. See, e.g., *J.B. Hunt Transp., Inc. v. Gen. Motors Corp.*, 52 F. Supp. 2d 1084, 1087-88 (E.D. Mo. 1999); *Tassin*, 946 F. Supp. at 1247-48; *Betts v. Gen. Motors Corp.*, No. 3:04-CV-169, 2008 WL 2789524, at *8 (N.D. Miss. July 16, 2008). Although this is a close issue, the Court concludes that any gaps in

Orloff's methodology can be brought to the fact-finder's attention during vigorous cross-examination. *See Daubert*, 509 U.S. at 595; *Echevarria v. Caribbean Aviation Maint., Corp.*, 841 F. Supp. 2d 565, 569 (D.P.R. 2012) (admitting Orloff's accident-reconstruction testimony over *Daubert* objection).


Eurocopter's second argument regarding Orloff's reliability is that Orloff did not base his opinions on a sufficient factual predicate. Specifically, Eurocopter points to Orloff's failure to consider "the significant maintenance issues associated with the facility and mechanic that had served the subject helicopter and installed the servo prior to the accident." (Mot. to Exclude 11.) But as pointed out by the Sulaks, "it is up to the jury to determine whether or not . . . Ray torqued the nut. Dr. Orloff considered that . . . Ray said he . . . torqued the nut." (Mot. to Exclude Resp. 13.) Merely because Orloff discounted the causative effect of error during maintenance as a cause of the crash (which is Eurocopter's theory of causation) does not equate to his theory's being unreliable. *See, e.g., Smith*, 2008 WL 5262367, at *2. Indeed, Eurocopter's challenge goes to the weight of Orloff's testimony and not its admissibility. *See Primrose Operating Co. v. Nat'l Am. Ins. Co.*, 382 F.3d 546, 562 (5th Cir. 2004); *Tyler Union Oil Co. of Cal.*, 304 F.3d 379, 392-93 (5th Cir. 2002); *accord i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir. 2010); *McLean v. 98801 Ontario, Ltd.*, 224 F.3d 797, 800-01 (6th Cir. 2000); *Echevarria*, 841 F. Supp. 2d at 569.

IV. CONCLUSION

Eurocopter has established as a matter of law that GARA's statute of repose applies to bar suit against Eurocopter as the manufacturer of the helicopter involved in the crash. However, the Sulaks have raised a genuine issue of material fact regarding whether the rolling provision of

GARA's statute of repose applies to save their claims from the statute. Eurocopter has not met its burden to show that the Sulak's accident-reconstruction expert's testimony should be excluded under Rule 702. This is buttressed by the fact that exclusion of expert testimony under Rule 702 should be the exception and not the rule.

SIGNED December 17, 2012.



TERRY R. MEANS
UNITED STATES DISTRICT JUDGE